DOCUMENT RESUME

ED 434 650 IR 019 812

| | |
|---|---|
| TITLE | LincOn: Internet for Education. Bringing the World to Illinois, 1998. Membership Application Form and Instructions. |
| INSTITUTION | Illinois State Board of Education, Springfield. |
| PUB DATE | 1998-04-00 |
| NOTE | 42p. |
| PUB TYPE | Guides - Non-Classroom (055) |
| EDRS PRICE | MF01/PC02 Plus Postage. |
| DESCRIPTORS | Access to Information; *Computer Networks; Elementary Secondary Education; Information Networks; *Internet; *State Programs; Telecommunications |
| IDENTIFIERS | Access to Technology; Connectivity; *Illinois |

ABSTRACT

This document contains the enrollment application form and line-by-line instructions for subscribing to LincOn, a statewide network, administered by the Illinois State Board of Education, that allows public K-12 schools to access the Internet. An overview of LincOn and a checklist for implementing LincOn membership are also included. Appendices include a discussion of domain names, common questions, and contact information. Also appended are forms and instructions for additional buildings/organizations, IP (Internet Protocol) request application and instructions, dial-up router information, and additional contacts, as well as the LincOn management release agreement. Also included is a fact sheet for the 17 LincOn points of presence in Illinois. (AEF)

**********
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
**********

IR

# Illinois State Board of Education

ED 434 650

# LincOn

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
☐ This document has been reproduced as received from the person or organization originating it.
☐ Minor changes have been made to improve reproduction quality.
• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

J. A. Spagnolo

## Internet for Education

*Bringing the World to Illinois*

**1998**

**Membership Application Form and Instructions**

IR019812



BEST COPY AVAILABLE

# Table of Contents


Page

LincOn Overview ..... 1

Applicant Checklist ..... 5

The LincOn Enrollment Application ..... 6

Instruction Booklet ..... 11

Appendix A: What's a Domain Name and Do I Really Need One? ..... 21

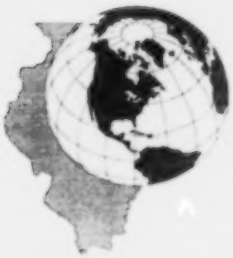
Appendix B: Common Questions ..... 23

Appendix C: Contact Information ..... 25

Additional Forms ..... After Appendix C

- ISBE 85-45A: LincOn Additional Buildings / Organizations
- ISBE 85-45B: LincOn IP Request Application
- ISBE 85-45C: LincOn Dial-up Router Information
- ISBE 85-45D: LincOn Additional Contacts
- LincOn Management Release Agreement

# Illinois State Board of Education
## LincOn Overview



The Illinois State Board of Education (ISBE) began to build a statewide network in the winter of 1995. It started off as an administrative network connecting the 45 Regional Offices of Education, the four Cook County Intermediate Service Centers, and the ISBE. Once the administrative network was constructed, the statewide network was connected to the Internet. This allowed public K-12 schools all over the state to access Internet by purchasing the equipment and circuits necessary to connect to their nearest Regional Office of Education.

It was an immediate success. The project was so successful that the network design had to be altered almost from the beginning to accommodate the number of schools that wished to connect. This redesigned network has become known as LincOn. The network is administered by the Illinois State Board of Education.

In Illinois, there are 15 major Local Access and Transport Areas (LATAs). These are arbitrary boundaries that define the areas in which a telecommunications company may provide local service. Within a LATA, a single local company, such as Ameritech, may provide all components of a circuit. However, if a circuit is needed to connect an entity in one LATA to an entity in another LATA, a long distance carrier, such as Sprint, must provide the circuit that crosses the LATA boundaries. This type of circuit is more expensive than one that is totally provided by a local telephone company.

A Point of Presence (POP) is a physical location in which telecommunication equipment is located. To build a statewide network, multiple POPs are set up and then connected with high-speed circuits. Entities connect to the statewide network by connecting to the nearest POP.

Since Illinois has 15 major LATAs, LincOn was designed so that there is at least one POP within each LATA. An entity that connects to LincOn will not have to provide a circuit that crosses from one LATA into another. The map at the bottom of the page shows the LATA boundaries. Each star indicates a LincOn point of presence.

All organizations connecting to LincOn will have to pay for the equipment located at their

**LincOn POP Cities**

| City | LATA |
|---|---|
| Chicago | 01 |
| Rockford | 02 |
| Moline | 03 |
| Sterling | 04 |
| Bloomington | 05 |
| Peoria | 06 |
| Champaign | 07 |
| Charleston | 08 |
| Springfield | 09 |
| Quincy | 10 |
| Olney | 11 |
| Carbondale | 12 |
| Paris | 14 |
| Belleville | 15 |
| Macomb | 18 |

site and for the circuit that connects their site to the nearest LincOn Point of Presence. These costs can vary depending on what type of equipment is required and what services are available in the area where the applying agency is located.

A quotation explaining itemized costs for the circuit and equipment needed by a LincOn applicant to connect is returned to applicants who file an application (attached). While LincOn places all orders for circuits and equipment, this is done on behalf of the applicant and the applicant is invoiced by the vendors. LincOn does not purchase any equipment or services for resale to any other entity.

LincOn is funded by the State of Illinois through an annual appropriation for public elementary and secondary schools (K-12). In August of 1997, legislation was passed that allows entities other than public K-12 schools to connect to the LincOn network.

Other entities that may now join the LincOn network include

- Private nonprofit elementary and secondary schools,
- Private nonprofit colleges and universities,
- Public community colleges,
- Public libraries,
- Public colleges and universities,
- Public museums, and
- Public municipal and local governments.

For the remainder of this document, these entities are referred to as "permissive members."

Permissive members pay two separate charges: a one-time enrollment charge and an annual subscription fee. The fees are not charges for service. These charges reimburse ISBE for money spent out of an appropriation intended for public K-12 education. By paying the charges, the permissive members become equal partners with public K-12 schools in LincOn's fundamental objective: bringing affordable Internet access to all classrooms and libraries in Illinois.

The one-time enrollment fee reimburses LincOn for costs associated with building the LincOn backbone. These costs include capital expenditures for equipment, site construction, and backbone circuit installations. Permissive members are charged a one-time base charge of $1,700. In addition to the base charge, there is a charge that reimburses LincOn for the port costs for the new member's connection. For example, a permissive member who connects to a LincOn POP with a telephone company provisioned T1 line can expect to pay a one-time base charge of $1,700 and $1,900 for the port to connect to the LincOn POP for a total of $3,600. The port charges include all CSU/DSUs and cables necessary to support the new circuit at the LincOn POP.

The one-time enrollment fee also covers expenditures for LincOn staff to consult with new members, set up new Domain Name Services, provision Internet Protocol (IP) addresses, and configure the routers for connecting to LincOn. The one-time cost will be detailed in the price quote.

Permissive members are also charged an annual subscription fee. This fee recovers costs for the ongoing maintenance of the LincOn backbone, which includes monthly circuit charges, rent, equipment maintenance, and staff salaries.

This annual subscription fee is based on the state fiscal year that runs from July 1 through June 30. New connections are prorated to the end of the current fiscal year on a per-month basis.

The fee changes each year. By March 31 of the subscription year, a new subscription fee will be mailed to current LincOn members that reflects the renewal charge for the next fiscal year. This gives members 90 days to decide if they want to stay with LincOn or move to a private Internet Service Provider. These charges are included in the quotation applicants will receive upon filing the attached application. New membership fees are due upon final circuit testing and will be prorated to the end of the current fiscal year.

The annual subscription fee is based on the number of hosts the applicant wants to connect to the network. The term "host" refers to each network interface card on each piece of equipment accessible through LincOn and includes computers, printers, routers and similar computer/telecommunication equipment.

**Annual Subscription Rate Per Each Circuit into LincOn**
**Fiscal Year July 1, 1998 through June 30, 1999**
**Costs Based on a T1 Connection**

| Host Count | Subscription |
|---|---|
| 1- 30 | $1,140 |
| 31- 60 | $1,830 |
| 61- 120 | $ 2,760 |
| 121- 240 | $ 3,720 |
| 241- Above | $ 3,840 |

The rates listed above are the lowest subscription rates available. A higher rate may be quoted depending on how the new LincOn member wishes to connect to the network and what services are available in their specific area of the state.

Small organizations with less than 30 computers may decide to join LincOn but not to connect directly to a LincOn POP. After reviewing all the options, they may elect to purchase a circuit between their facility and an existing member of the LincOn network. This type of connection does have some disadvantages. For one, the LincOn network management team will not be in a position to support this connection. The state does not have the equipment or staff necessary to manage through a LincOn member's router and into another router at another location. To expand the LincOn team to a point where such support is available would greatly increase both the one-time charge and the annual subscription fees charged to members who are not public K-12 schools.

Joining LincOn by connecting to a current member of LincOn also affects network performance. The available bandwidth must be shared between the current LincOn member and the LincOn POP.

However, these types of connections to the LincOn backbone may meet the needs of a particular applicant. The LincOn Network Specialist assigned to review the application will help the applicant decide if this type of connection makes good sense. If it does, the applicant must sign the LincOn Network Management Release Form which releases LincOn from any responsibility in managing the circuit between the applicant location and the LincOn member it attaches to. Should a problem arise with the connection, LincOn staff will only report on the status of the circuit between the LincOn POP and the LincOn member who is connected directly to the LincOn POP.

New members who join LincOn by connecting to an existing member are responsible for making all arrangements for their connection at the existing member's site. LincOn does not negotiate or recommend fees or rates that an existing LincOn member may charge a new member for the connection. LincOn only requires that new members complete the application process and pay all applicable fees. In this type of situation, if the new members are permissive members, they would be expected to pay the one-time base charge of $1,700 and the annual subscription fee based on the number of computers they are going to connect. They would not reimburse LincOn for the port at the LincOn POP since that has already been paid by the current LincOn member.

Each connection to a LincOn POP is considered a discrete connection made by a single identifiable member of LincOn. If a district has each school building connect to a LincOn POP, each school building is considered a LincOn member for network management purposes. This is also true for permissive members. If an entity has several facilities and wishes each facility to connect to the LincOn POP, the entity pays the one-time reimbursement charge of $1,700 and the port costs for providing each facility with a port at the LincOn POP. If a permissive member has multiple buildings already networked together and makes a single connection to a LincOn POP, the member pays the one-time reimbursement fee of $1,700 and a single fee which covers the cost of the LincOn POP port.

For the purposes of the LincOn project, an entity can be represented by a group of buildings within a close community of interest that have worked together in a common purpose. This common purpose must precede the purpose of connecting to the Internet through the LincOn project. If a community builds a community-wide network and wants all eligible entities to connect to LincOn through a single connection, there may be a single port charge due LincOn and each separate entity within the community would need to complete a LincOn membership application. While the public schools can't reimburse LincOn for any fees, all permissive entities would owe both the one-time $1,700 base charge and applicable subscription fees based on the number of hosts they wished to access LincOn.

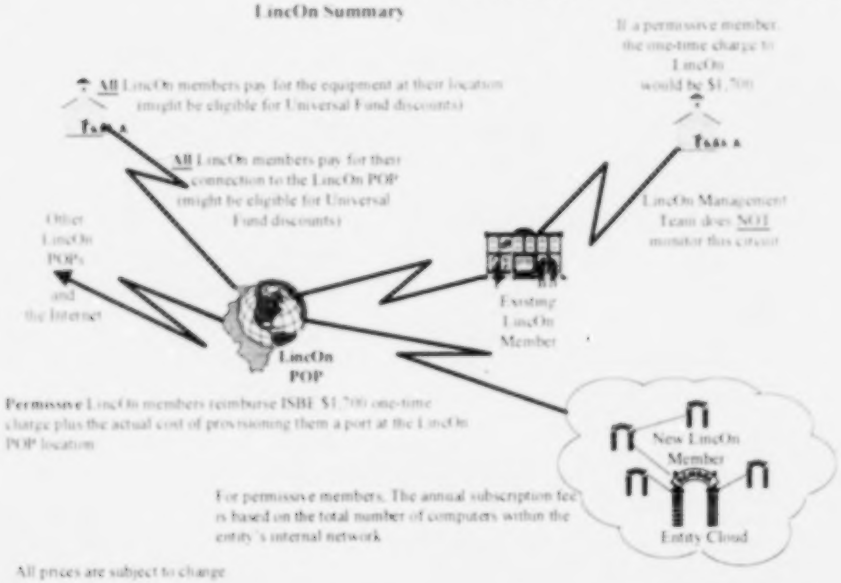
The annual subscription fee for all permissive customers is based on the total number of computers connected to LincOn. These computers can be located within a single building or multiple buildings.

All LincOn members who are eligible for discounts under the Universal Service Fund managed by the Schools and Libraries Corporation may only apply for such discounts on the portion of their network connections that they are purchasing from an approved provider. LincOn is not an approved provider. LincOn is a coalition working on behalf of its members to obtain affordable Internet access. LincOn will apply for discounts from the Universal Service Fund. These discounts will be reflected in the reimbursement fees LincOn requests from permissive members who are eligible for discount, such as nonprofit private K-12 schools or a library. Since LincOn's rate is an annual subscription, permissive customers who are eligible for discount should expect next year's subscription fee from LincOn to go down.

In conclusion to this overview, LincOn retains several rights under Illinois law. The first is the right to reject any permissive applicant's request. Rejections are not arbitrary and are fully explained. There are at least two reasons an application might be rejected: 1) the applicant is not eligible as defined in the language of the law, or 2) LincOn's public K-12 schools would experience a performance decrease in their network connection because of the way the permissive applicant has requested to be connected.

LincOn also reserves the right to alter any prices that have been stated in this overview since actual costs will vary from year to year. The final fees are provided permissive applicants as part of the application process.

**LincOn Summary**


If a permissive member, the one-time charge to LincOn would be $1,700
All LincOn members pay for the equipment at their location (might be eligible for Universal Fund discounts)
Fees
All LincOn members pay for their connection to the LincOn POP (might be eligible for Universal Fund discounts)
Fees
LincOn Management Team does NOT monitor this circuit
Other LincOn POPs and the Internet
Existing LincOn Member
LincOn POP
Permissive LincOn members reimburse ISBE $1,700 one-time charge plus the actual cost of provisioning them a port at the LincOn POP location
New LincOn Member
Entity Cloud
For permissive members, The annual subscription fee is based on the total number of computers within the entity's internal network
All prices are subject to change

 BEST COPY AVAILABLE

# LincOn Checklist

❑ 1. Fill out the attached "LincOn Enrollment Application" and all forms and worksheets that apply.

❑ 2. Fax or mail the following to the number or address listed below:
- Copy of enrollment application
- Copies of all worksheets used to prepare the enrollment application
- Copies of all additional application forms

Fax to (217)782-1976

**Note:** Form LDEF-06 "Router Management Release Form" cannot be accepted by fax. This form must be signed and mailed.

**Mail to:** LincOn Administration S395
100 N. First Street
Springfield, IL 62777-0001

❑ 3. The LincOn representatives will evaluate your application. If clarification of details is needed, the person who prepared the enrollment application will be contacted.

❑ 4. Once the application is complete and accepted by LincOn, a package will be sent to the individual specified on line 28 of WAN Provisioning Section of the enrollment application form. This package will include
- Telecommunication quote,
- Telecommunication hardware quote,
- One-time setup charges (if applicable),
- Subscription charge (if applicable),
- Domain name registration charge (if applicable), and
- LincOn contract.

❑ 5. Mail the signed LincOn contract and the signed quotes with a Purchase Order (P.O.) back to:
LincOn Administration - S395
100 N. First Street
Springfield, IL 62777-0001

❑ 6. On receipt of the signed quote with P.O. numbers and the signed contract, LincOn will
- order the quoted hardware;
- provision the WAN connections; and
- assign IP Addresses, Web page space, domain information, and e-mail addresses

❑ 7. A package containing the following information will be sent to the Primary Technical Contact:
- LincOn membership ID
- Telecommunication connection estimated installation date
- Hardware estimated ship date
- IP Address range for network
- Specific IP Address for servers
- District domain name
- WEB page domain name
- E-mail addresses
- Contact information
- Installation instructions for telecommunication equipment
- Configuration instructions for Win95, WFW, Mac OS

BEST COPY AVAILABLE

ILLINOIS STATE BOARD OF EDUCATION
100 North First Street
Springfield, Illinois 62777-0001

# LincOn
# ENROLLMENT APPLICATION

## FISCAL AGENT INFORMATION

1. FEIN CODE

2. TAX CLASSIFICATION
- ☐ Public
- ☐ Private Non-Profit

3. TYPE
- ☐ K-12
- ☐ Municipality
- ☐ Library
- ☐ Community College
- ☐ College/University

4. NAME

5. PHONE

6. FAX

7. TAX EXEMPT NUMBER

8. BILLING ADDRESS

RECEIVING CLERK'S NAME

ADDRESS 1

ADDRESS 2

CITY, STATE, ZIP CODE

9. STREET ADDRESS
- ☐ ***Same as billing address***

RECEIVING CLERK'S NAME

ADDRESS 1

ADDRESS 2

CITY, STATE, ZIP CODE

## CONNECTING BUILDINGS

10. Specify the physical building name and location that will be connecting to the LincOn Network.

☐ ***The Fiscal Agency's street address is the attaching location***

SITE NAME

SITE CONTACT'S E-MAIL ADDRESS

SITE CONTACT'S NAME

PHONE

SITE CONTACT'S TITLE

FAX

ADDRESS 1

ADDRESS 2

CITY, STATE, ZIP CODE

☐ YES ☐ NO 11. Will there be more than one building or organization within your Fiscal Agency connecting to LincOn?

***If Yes:***

A. Will your Fiscal Agency building be one of the connecting buildings?
- ☐ YES ☐ NO

B. What is the total number of buildings and organizations you will be attaching?

C. Please **FILL OUT** and **ATTACH** to this application form ISBE 85-45 A (Additional Buildings/Organizations) for all additional buildings or organizations.

## POP SITE CONNECTION

☐ YES ☐ NO 12. Is your organization planning on attaching to LincOn through an existing LincOn member?

***If Yes***

A. Enter the following information about this LincOn member.

MEMBERSHIP ID

NAME

CONTACT

PHONE

FAX



BEST COPY AVAILABLE

## DOMAIN NAME INFORMATION

*Use this section only if you **ALREADY** have a Domain Name.*

☐ YES ☐ NO 13. Does your organization currently have a domain name?

***If Yes:***

A. Enter the fully qualified domain name:

B. Specify the name and location of the organization that is handling your DNS:
NAME OF ORGANIZATION:

CONTACT:

E-MAIL ADDRESS:

PHONE: FAX:

C. Should LinCOn secondary (backup) the DNS?

☐ YES ☐ NO

D. If you have an organization handling your DNS, do you want LinCOn to assume the management of your DNS?

☐ YES ☐ NO

## DOMAIN NAME REQUEST

*Use this section only if you **DO NOT** have a Domain Name.*

14. Requested Domain Name

A. First choice:

B. Second choice:

C. Third choice:

☐ YES ☐ NO 15. Will your organization be running its own DNS Server?

***If Yes:***

A. Should LinCOn auto-assign an IP Address?

☐ YES ☐ NO

B. Should LinCOn secondary (backup) the DNS?

☐ YES ☐ NO

☐ YES ☐ NO 16. Will the billing contact be different than the billing clerk on Line 8?

***If Yes:***

A. Please **FILL OUT** and **ATTACH** to this application form ISBE 85-45 D (Additional Contacts).

17. Who will be the Administration Contact for your domain?

☐ Primary Technical Contact (line 33)
☐ Secondary Technical Contact (line 39)
☐ Other (Please **FILL OUT** and **ATTACH** to this application form 85-45 D (Additional Contacts))

18. Who will be the Technical Contact for your domain?

☐ Primary Technical Contact (line 33)
☐ Secondary Technical Contact (line 39)
☐ Other (Please **FILL OUT** and **ATTACH** to this application form 85-45 D (Additional Contacts))

## WEB SERVER

☐ YES ☐ NO 19. Will your organization be running its own Web Server?

***If Yes:***

A. Should LinCOn auto-assign an IP Address?

☐ YES ☐ NO

B. Will the Web Server run on the same machine as:

☐ DNS Server
☐ E-Mail Server
☐ Dedicated Machine
☐ Other (describe):

***If No*** and **ONLY IF** you are a K-12 public school:

C. Would you like free Web space from LinCOn?

☐ YES ☐ NO

10

20. Individual responsible for Web Server:

☐ Primary Technical Contact (line 33)
☐ Secondary Technical Contact (line 39)
☐ Other (Please **FILL OUT** and **ATTACH** to this application form 85-45 D (Additional Contacts))

## E-MAIL SERVER

☐ YES ☐ NO 21. Will your organization be running its own E-Mail Server?

***If Yes***

A. Should LincOn auto-assign an IP Address?

☐ YES ☐ NO

B. Will the E-Mail Server run on the same machine as:

☐ DNS Server ☐ Other (describe)

☐ E-Mail Server

☐ Dedicated Machine

***If No*** and **ONLY IF** you are a public K-12 school

C. Would you like free E-Mail accounts for STAFF MEMBERS ONLY from LincOn?

☐ YES ☐ NO

22. Individual responsible for E-Mail Server

☐ Primary Technical Contact (line 3J) ☐ Other (Please **FILL OUT** and **ATTACH** to this application form ISBE 85-45 ☐ Additional Contacts)

☐ Secondary Technical Contact (line 3K)

## TELECOMMUNICATION INFORMATION

*LincOn staff must place all circuit and hardware orders on behalf of the applicant. All applicant placed orders will not be honored.*

23. Who should receive the quotes? ***(select only one)***

☐ Fiscal Agent ☐ Enrollment Application Preparer

☐ Other (specify below)

NAME TITLE

E-MAIL ADDRESS FAX

ADDRESS

CITY, STATE, ZIP CODE

24. Requested installation date

25. Type of connection requested ***(select only one)***

☐ T1 ☐ Other (describe)

☐ DS3

☐ YES ☐ NO 26. Will the demarc need to be extended by the telephone company?

***If Yes:***

A. Specify the room number or describe the location

## BORDER ROUTER INFORMATION

*The Border Router has to meet specific LincOn requirements. The router specified in line 27a may not qualify. If you are requesting the use of an existing router in line 27a, also answer line 28. This will speed your processing if your current router does not qualify.*

☐ YES ☐ NO 27. Do you currently have a router that you wish to use as the Border Router?

***If Yes,*** specify the following:

A. MANUFACTURER MODEL

FLASH MEMORY RAM DRAM SLOTS AVAILABLE

28. If you don't have a router or your current router does not qualify, **choose one** of the following:

☐ Will require help in choosing correct router

☐ Have selected the router listed below

MODEL OS FLASH MEMORY

SYSTEM RAM ADDITIONAL INTERFACES



BEST COPY AVAILABLE

## IP ADDRESSES REQUEST

29 Network type *(select only one)*

- ☐ IP Gateway / Private IP *(answer ONLY line 30 and SKIP line 31)*
- ☐ Bridged Flat / Switched *(answer ONLY line 30 and SKIP line 31)*
- ☐ Routed *(answer ONLY line 31 and SKIP line 30)*

*Answer only if IP Gateway / Private IP Network / Bridged Network*

30 Host count for IP Gateway / Private IP / Bridged / Flat / Switched Network

| | CURRENT | NEW WITHIN 12 MONTHS | TOTAL BY END OF 12 MONTHS |
|---|---|---|---|
| A IP Addresses requested? | | | |
| B Internet connecting hosts? | | | |

*Answer only if Routed Network*

31 Host count for Routed Network

A Total Cable Segments

B If answer to Line 31A is greater than 10, **FILL OUT** and **ATTACH** to this application form (see pg. 45 B Location of Request Application). Do not fill out line 31C.

C If answer to Line 31 is less than or equal to 10, fill out the table below.

*Fill out table only if you have 10 or less cable segments.*

**IP READY HOSTS**

| CABLE SEGMENT | CURRENT | NEW WITHIN 12 MONTHS | TOTAL BY END OF 12 MONTHS |
|---|---|---|---|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| **GRAND TOTAL of all hosts at end of 12 months** | | | |

32 **DRAW** a network layout in the space provided below. (See example in the instruction manual)

12

BEST COPY AVAILABLE

## TECHNICAL CONTACTS

**PRIMARY**

33 NAME

34 TITLE

35 AFFILIATION *(select only one)*

☐ Full-Time Staff ☐ Part-Time Staff

36 DAYTIME PHONE 1 DESCRIPTION

DAYTIME PHONE 2 DESCRIPTION

DAYTIME PHONE 3 DESCRIPTION

37 NIGHTTIME PHONE

38 E-MAIL ADDRESS

**SECONDARY**

39 NAME

40 TITLE

41 DAYTIME PHONE 1 DESCRIPTION

DAYTIME PHONE 2 DESCRIPTION

DAYTIME PHONE 3 DESCRIPTION

42 NIGHTTIME PHONE

43 E-MAIL ADDRESS

44 AFFILIATION *(select only one)*

☐ Full-Time Staff

☐ Part-Time Staff

☐ Vendor/Consultant

**If Vendor/Consultant, please fill out the following information:**

COMPANY NAME

FAX

ADDRESS 1

ADDRESS 2

CITY, STATE, ZIP CODE

## PREPARER'S USE ONLY

*I declare that I have examined this application and to the best of my knowledge it accurately represents all the organizations and buildings applying for LincOn admission described within.*

45 SIGNATURE

49 ORGANIZATION

46 DATE

50 E-MAIL ADDRESS

47 NAME (print or type)

51 PHONE

48 TITLE

52 FAX

## FISCAL AGENT'S USE ONLY

*I declare that I have examined this application and to the best of my knowledge it accurately represents all the organizations and buildings applying for LincOn admission described within.*

53 SIGNATURE

57 E-MAIL

54 DATE

58 PHONE

55 NAME (print or type)

59 FAX

56 TITLE



BEST COPY AVAILABLE

# LincOn Enrollment Application Instructions

## Who Can Connect to the LincOn Network?

The following entities may connect to the LincOn Network:

* Public K-12 schools
* Nonpublic K-12 Schools - meaning nonprofit, non-home-based, nonpublic elementary or secondary school that is in compliance with Title VI of the Civil Rights Act of 1964 and which satisfies the attendance requirements of Section 26-1 of the School Code.
* Public Community Colleges
* Public Libraries
* Public Universities
* Museums on public land
* Other State Agencies - meaning other agencies not listed may enter into intergovernmental contract or agreement with the State Board of Education provided that the contract or agreement is in compliance with the Illinois Department of Central Management Services' mandate to provide telecommunications services to all state agencies.

## Section: Fiscal Agent Information

*Only one fiscal agency can apply for admission into the LincOn Network with each Enrollment Application. For example public high school and public grade school can attach using one form. If a public school district and public library wish to build a Wide-Area Network to attach to the LincOn Network, both the school district and public library will need to submit enrollment applications.*

**Line 1: FEIN Code**
Federal Employers Identification Number

**Line 2: Tax Classification**
Select the tax classification that best fits your organization

**Line 3: Type**
Select the type that best fits your of organization

**Line 4: Name**
This is the full name of the Fiscal Agent of the entity that is applying for enrollment into the LincOn Network

**Line 5: Phone**
Phone number for normal office hours

**Line 6: Fax**
Fax number for normal office hours

**Line 7: Tax-Exempt Number**
Used when placing orders in behalf of the applicant

**Line 8: Billing Address**
Where should normal mailings be sent? This should be the postal drop for the organization listed on Line 4. Please specify if there is a billing clerk.

**Line 9: Street Address**
Where should large boxes and equipment deliveries be sent? This should be the street address of the organization listed on Line 4. Please specify if there is a receiving clerk. If this is the same as the "Line 8: Billing Address" then check the "Same as Billing" box.

## Section: Connecting Buildings

**Line 10: The building name and location that will be connecting to the LincOn Network**
If you are an entity such as a high school, your fiscal agent would be the district office. But let's say your building is that actual point of connection: therefore, you would fill out the name and address information for your building here. This would apply to any entity that is an organization within a larger fiscal agency. If your organization is its own fiscal agent, then you can check the box "Same as Fiscal Agent's Shipping Address." This will be the location where the connection to the LincOn Network will be installed.

**Line 11, 11a, 11b, and 11c: Will there be more than one building or organization within your Fiscal Agency connecting to LincOn?**
If the building with street address listed on Line 10 (if the "Same as Fiscal Agent's" box is checked, then

the same as Line 9) will be the only building attaching to the LincOn Network, then answer No. Otherwise, answer Yes and specify the number in Line11a and fill out form ISBE 85-45A "Additional Buildings/Organizations." Attach form ISBE 85-45A to the enrollment form when submitting the enrollment form to LincOn.

*An organization may reside in one or more buildings. If so, then each building that will be linked into the LincOn Network must be specified. If there are two organizations under the same fiscal agency within one building and both are going to be attaching through the same connection, then both still need to be specified.*

## Section: POP Site Connection

### Line 12: Is your organization planning on attaching to LincOn through an existing LincOn member?

There may be an organization that already has a connection into the LincOn Network that is very close to your organization. If it benefits your organization more to connect through them than to go directly to a LincOn POP, answer Yes.

*If your organization chooses to connect to the LincOn Network through an existing LincOn member, you will need to fill out the LincOn Management Release Agreement which is found at the end of the booklet. By connecting through another member, your organization becomes responsible for a number of activities. You should read the Release Agreement very closely to see if your organization is capable of handling all the new responsibilities.*

### Line 12a: If YES, enter the following information about this LincOn member:

You need to specify the LincOn member of record that you wish to use as your connection site. You can get the membership number from the organization to which you will be connecting. For the rest of this information, please enter for the person you have been talking to as a current LincOn member.

## Section: Domain Name Information

*This section is only used if you ALREADY have a domain name. If you do not have a domain name and need to request one, then proceed to the section Domain Name Request. If you will be entering the LincOn Network through another member, you may want to consider being part of its domain if it is appropriate.*

Tip: If domain names are new to you, try reading Appendix A: What Is a Domain Name before working in this section.

### Line 13 and 13a: Does your organization currently have a domain name?

If you currently have a domain name, please specify it on Line 13a.

### Line 13b: If YES, what organization is handling your DNS?

*If you have an organization managing your DNS, they will need to be contacted to adjust the IP Addresses you will be receiving from the LincOn Network. Also, reverse DNS will need to be configured for your host machines within your domain. This can only work well if you specify the contact person for the organization running your DNS.*

If you currently have a connection to the Internet and have a domain name, someone is managing your DNS. This could be a machine at your organization, or it could be some other organization. If your organization is running its own DNS, please enter "Self Run" within the Organization's Name and specify a contact person. If you have another organization managing your DNS, then specify its name and a contact person.

### Line 13c: If YES, should LincOn secondary (backup) the DNS?

Your organization should have two DNS servers able to respond to DNS inquires for your domain. Most of the time it is not practical for you to have two servers. Even if you did, one should be located outside your local network in case your connection should go down. Lastly, the InterNIC requires you to have two DNS servers when applying for a domain name.

**Line 13d: If you have an organization handling your DNS, do you want LincOn to assume the management of your DNS?**
If the domain name falls within the K12.IL.US or LincOn.Net domains, LincOn may administrate it and save your organization some money. You will be notified if this can be done.

## Section: Domain Name Request

*This section is only used if you DO NOT have a domain name. If you will be entering the LincOn Network through another member, you may want to consider being part of their domain if it is appropriate.*

**Line 14: Requested Domain Name**
The domain name you want might be being used by another entity. Choose up to three domain names. If the first is already in use, the second will be tried. If all three are in use the person who prepared the application form will be contacted for additional choices.

Most domain names are registered with the InterNIC. Generally, the Internic charges a fee for registering a domain name. The applicant will be notified in the quote if a fee is applicable.

If you have additional questions as to what domain name to use or how much might it cost, or you simply need to know more about them, please contact LincOn or one of the Learning Technology Hubs. The phone numbers can be found in Appendix C of this booklet.

**Line 15: Will your organization be running its own DNS Server?**
Will you have at least one computer within one of the organization's buildings that will be running DNS Server software? If yes, depending on how Line 15a and 16b are answered, LincOn will make the appropriate entries in its DNS server.

**Line 15a: If YES, should LincOn auto-assign an IP Address?**
If Yes, when IP Addresses are assigned, one will be assigned by LincOn to be used as the IP Address for your organization's DNS Server. This information will be sent to the **Primary Technical Contact**. If you answer No, use form LDEF-08 "LincOn DNS Host Assignments" at a later date to let LincOn personnel know the correct IP Address for your DNS Server. The form can be found in the back of this booklet. Fill in the host names with the IP Addresses you are assigning them and return this form to the address specified in the form's instructions.

**Line 15b: If YES, should LincOn secondary (backup) the domain?**
LincOn will secondary all domains that fall within the K12.IL.US and LincOn.Net domains. LincOn does not guarantee that this service will be provided for any domains outside K12.IL.US and LincOn.Net. If your organization is currently running a domain outside of either of these domains and would like LincOn to secondary it, consult with your Local Area Hub (see Appendix C: Contact Information for phone numbers).

**Line 16 and 16a: Will the billing contact be different than the Billing Clerk on Line 8?**
If the bill for any domain name registration is different than that listed on Line 8, you will need to identify the correct billing party and address in the "Additional Contacts" form.

**Line 17: Who will be the Administrative Contact for your domain?**
When a domain is registered with the InterNIC, several persons need to be listed. If the contact is neither the Primary or Secondary Contacts, then fill in the appropriate information on the ISBE 85-45D "Additional Contacts" form found in the back of this instruction booklet.

**Line 18: Who will be the Technical Contact for your domain?**
When a domain is registered with the InterNIC, several persons need to be listed. If the contact is neither the Primary or Secondary Contact, then fill in the appropriate information on the ISBE 85-45D "Additional Contacts" form found in the back of this instruction booklet.

## Section: Web Server

**Line 19: Will your organization be running its own Web Server?**
Will you have at least one computer within one of the organization's buildings that will be running Web Server software? If yes, depending on how your answered questions about your DNS, LincOn will make the appropriate entries in its DNS server and IP Address assignments.

**Line 19a: If YES, should LincOn auto-assign an IP Address?**
If Yes, when IP Addresses are assigned, one will be assigned by LincOn to be used as the IP Address for your organization's Web Server. This information will be sent to the **Primary Technical Contact**. If you answer No, you can let LincOn staff know the information after connecting.

**Line 19b: If YES, will the Web Server software be running on the same hardware as another server?**
This is used to determine if an IP address will be the same as that of another machine. If this software will be the only server software on a particular computer, select Dedicated Machine.

**Line 19c: If NO and ONLY IF you are a public K-12 school, would you like free Web space from LincOn?**
LincOn has Web space available for public K-12 applicants requesting it. This is a free service to public K-12 schools. Your Web page will be assigned to WWW.*<your domain name>*.

**Line 20: Individual responsible for Web Server.**
If there are problems with the management of the Web server, who should LincOn contact? If the contact is neither the Primary or Secondary Contact, then fill in the appropriate information on the ISBE 85-45D "Additional Contacts" form found in the back of this instruction booklet.

## Section: E-mail Server

**Line 21: Will your organization be running its own E-mail Server?**
Will you have at least one computer within one of the organization's buildings that will be running Web Server software? If yes, depending on how your answered questions about your DNS, LincOn will make the appropriate entries in its DNS server and IP Address assignments.

*LincOn will create e-mail accounts ONLY for staff of public K-12 schools. Students and other organizations are not eligible for e-mail accounts.*

**Line 21a: If YES, should LincOn auto-assign an IP Address?**
If Yes, when IP Addresses are assigned, one will be assigned by LincOn to be used as the IP Address for your organization's E-mail Server. This information will be sent to the **Primary Technical Contact**. If you answer No, you can let LincOn staff know the information after connecting.

**Line 21b: If YES, will the E-mail Server software be running on the same hardware as another server?**
This is used to determine if an IP address will be the same as that of another machine. If this software will be the only server software on a particular computer, then select Dedicated Machine.

**Line 21c: If NO and ONLY IF you are a public K-12 school, should LincOn allocate e-mail accounts to the district?**
The Learning Technology Hubs have server space available for e-mail accounts for district staff. The POP Mail Server address will be as follows:

mail.*<Your Domain Name>*

You will be contacted by your Technology Hub regarding your e-mail account information.

**Line 22: Individual responsible for E-mail Server**
If there are problems with the management of your organization's E-mail Server, who should LincOn contact? If the contact is neither the Primary or Secondary Contact, then fill in the appropriate information on the ISBE 85-45D "Additional Contacts" form found in the back of this instruction booklet.

## Section: Telecommunication Information

*If you are connecting into the LincOn Network through an existing LincOn member, you will need to provision your own communication lines into that member. LincOn will not provision any lines for an application connecting into an existing member. You will not fill out lines 23, 25, and 26. You will fill out line 24 to let LincOn know when to allow for your activation.*

*You will also need to fill out the LincOn Management Release Agreement. This document is found at the end of the booklet. By connecting through another member, your organization will become responsible for a number of activities. You should read*

*the Release Agreement very closely to see if your organization is capable of assuming all the responsibilities.*

**Line 23: Who should receive the quote?**
Before any connection or equipment is ordered on behalf of the applicant, an itemized quote is sent to the specified recipient. Upon receipt, a signed purchase order must be submitted to LincOn before the ordering process can begin. This quote will outline the cost of hardware, telecommunication lines, and enrollment fees when applicable.

If **Other Name** is selected, you **MUST** specify all the requested information. If any field is left out, your application will not be processed until the preparer can be contacted to supply the correct information.

*The LincOn Network and ISBE are not selling any products. LincOn is placing orders on behalf of the applicant to insure that the correct hardware and connection type are correct for the applicant to attach to the LincOn network.*

**Line 24: Request Installation Date**
Date requested may not be the actual date of activation. LincOn will make every effort to meet your connectivity requirements in a timely fashion.

Tip: It may be to your advantage not to specify as quick a date as you might at first think. If no one will be around during the summer to use the connection, you can save money by having it activated in late July. This would give you time to give your personnel training before the start of a school year but keep the first year's cost down.

**Line 25: Type of connection requested**
If your connection preference is not listed or you are not sure what to select, select the "**Other Describe**" option. You will be contacted by a member of the Learning Technology Hub's staff.

Each connection type has specific costs; therefore, a quote will be sent to the person specified on Line 23. The quote will also include alternative connection types such as Frame Relay if available. After receiving the quote, your organization may find the cost of the connection type you requested too substantial for the near term. When you return your quote with a signed PO, if more than one option is available, simply select the connection type that best meets your cost-performance ratio.

LincOn was established to provide T1 connections to every school district in the State of Illinois. This type of connection may not best suit every organization. In some cases other types of connections provide greater benefits, such as cost and/or bandwidth, than a T1 connection. In these cases, such an organization may have additional installation, configuration, and setup costs than a default T1.

**Line 26 and 26a: Will the demarc need to be extended by the telephone company? If YES, specify the room number or describe the location.**
When a phone line is installed into a building, its demarc location is the phone closet. You may have your router and CSU/DSU installed in a location other than the phone closet. Phone companies charge a fee to put a demarc into a location other than the phone closet. If you answer Yes, you are specifying that you want LincOn to request a demarc extension for you and you want to receive as part of your quote the estimated cost of the extension. Alternatively, you may wish to install the extension yourself or make provisions for its move by a vendor. If so, answer No to this question.

## Section: Border Router Information

*LincOn will assume all management responsibilities for the border router unless the LincOn Management Release Agreement is completed. This form allows LincOn members to assume responsibility of their router management.*

*The LincOn Management Release Agreement can be found at the end of this booklet. By signing this agreement, your organization becomes responsible for a number of activities. You should read the Release Agreement very closely to see if your organization is capable of assuming all the responsibilities.*

**Line 27: Do you currently have a router that you wish to use as the border router into the LincOn Network?**
If the specifications of your current router do not meet the needs of the LincOn network, you will be asked to purchase an appropriate border router.

Tip: To speed the process of enrolling into the LincOn Network, even if you currently have a router you wish to use, specify a router in Line 28 also. If your router does not qualify, you will be sent a quote outlining the cost of one that will. This way you will not be delayed in your connection to LincOn.

### Line 27a: If YES, specify the following router information

The passwords and user names are not required for form processing. However, if your router qualifies as a border router, LincOn will assume all management responsibilities of this router, and the user name and passwords will be required. If you do not specify these now, they will be asked for again when you receive the LincOn Contract and your enrollment will not be completed until these are received.

Tip: If this router is a key router for managing you organization's wide-area network, you should use a different router as the border router. This will allow you to keep control of your wide-area management. You will simply have a small router sitting between your network and the LincOn Network.

### Line 28: If you don't have a router or your current router does not qualify, choose one of the following:

If you will require help, then check the box next to "Will require help in choosing correct router." A representative of the LincOn Network will contact you after you submit the application form.

If you have already consulted with a network engineer and know the router you would like to have ordered for you, check the box next to "Have selected the router listed below." Fill out all the information about the router.

If you need assistance in the selection process, you can consult other technical entities (such as your vendors or private consultants) for help. If you would like a LincOn representative to contact you and help you make the proper choice of routing equipment then choose the "Will require help in choosing correct router" box. A LincOn representative will contact the preparer of the enrollment application after you submit the form.

Tip: The fastest enrollment process is achieved by choosing a router with this application form.

## Section: IP Addresses Request

### Line 29: Network Type

Your type of network determines how IP addresses are assigned. Choose the appropriate type for your network.

Tip: A routed network will either have a router on the network somewhere or will have two or more Network Interface Cards (NICs) within a server. If you have more than one server on the network, as long as at least one of them has more than one NIC, you have a routed network.

### Line 30: Host count for IP Gateway / Private IP / Bridged Network / Flat Network

Read This! *Be as close as possible with your estimates of future growth. LincOn charges all entities other than public K-12 organizations a subscription charge based on the number of computers connecting to the Internet. The subscription fee is updated annually. All organizations, public K-12 or otherwise, are subject to audits by LincOn of their IP Addresses being used.* ***Inaccurate totals can cause your organization to be expelled from the LincOn Network.***

These types of networks can all be considered the same when LincOn allocates IP Addresses. They logically look like a single-cable network.

Tip: Usually a "host" will be a computer. But to be exact, a host is any device that can have its own IP Address or simply can access the Internet. This includes printers, servers, switches, hubs. If you are not sure, you should contact the vendor who installed the equipment to see if it can be classified as a host. (There is even a dorm Coke machine connected directly to the Internet so students down the hall can check to see whether or not the beverage of choice is available.)

Tip: If you want a little more information about IP Address, you'll find that they are discussed somewhat in Appendix A: What is a Domain Name.

### Line 30a: Total number of IP Addresses requested

This is the total number of real IP Addresses needed. If you have a firewall, IP Gateway, or Private IP network, don't forget to include any additional real IP addresses that might be needed for such things as a video conference.

### Line 30b: Total number of Internet Connecting Hosts

This is a count of every machine that will be accessing the Internet. Even if you are planning on using IP-IPX Gatewaying or Private IP, every machine or device that will access the Internet needs to be counted.

### Line 31: Host count for Routed Network

*Be as close as possible with your estimates of future growth. LincOn charges all entities other than public K-12 organizations a subscription charge based on the number of computers connecting to the Internet. The subscription fee is updated annually. All organizations, public K-12 or otherwise, are subject to audits by LincOn of their IP Addresses being used.* ***Inaccurate totals can cause your organization to be expelled from the LincOn Network.***

A routed network has special needs. Each cable segment in a routed network needs its own subnet of IP Addresses which may not correspond directly to the number of computers on the cable. By having an accurate count of cable segments and hosts on each segment, LincOn will be able to get your organization the IP Addresses it needs to connect all the specified machines onto the Internet.

### Line 31a: Total Cable Segments

This can be a very tricky item to determine if you are not a network engineer. This number includes all network cables coming out of a server, all router ports going into your network, and the interaction of these cables from different servers on a large network. You may find that you will need some professional help in determining the correct number.

### Line 31b: If answer to line 31a is greater than 10, include Form ISBE 85-45B, LincOn IP Request Application

The table provided in the application form is only capable of handling ten cable segments. This is usually enough for the average organization. However, some wide-area networks that constitute several buildings, floors and servers might have many more than ten cable segments. If so, you will find at the end of this instruction booklet a form that will allow you to detail all of your cable segments.

**Tip:** If you don't have this information already, this form is a good way to document your network. It can be advantageous to have a good host and cable count when you are managing a large network.

### Line 31c: If answer to line 31a is less than or equal to 10, fill out the table below

The table allows up to ten cable segments to be specified. If you have more than ten cable segments, you need to fill out the form ISBE 85-45B LincOn IP Request Application instead of this table.

There are three columns to fill in. These columns are "Current," "New within 12 months," and "Total by end of 12 months."

The "Current" column is the number of computers, printers, servers, or any other device that can accept an IP Address right now that is on a given cable segment. This does NOT include enabling any new computers that will be purchased or that will be upgraded at a later date to use IP Addresses.

The "New within 12 months" column is the ADDITIONAL number of computers, printers, servers, or any other device that can accept an IP Address that you plan on buying in the next 12 months. This number does NOT INCLUDE the number specified in the "Current" column.

The "Total by end of 12 months" column is the addition of the first column (Current) and the second column (New within 12 months).

Don't forget to total the "Total by end of 12 months" column and put the answer into the "Grand Total of all hosts at end of 12 months" answer box.

***Cable Segment example:***

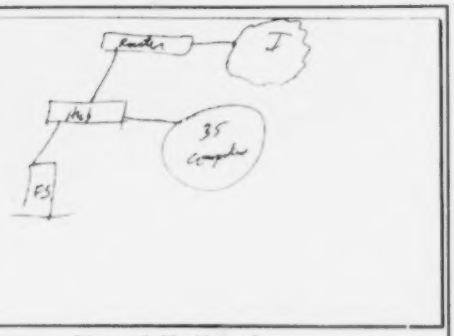



Diagram2. Flat Network
Only one cable segment.

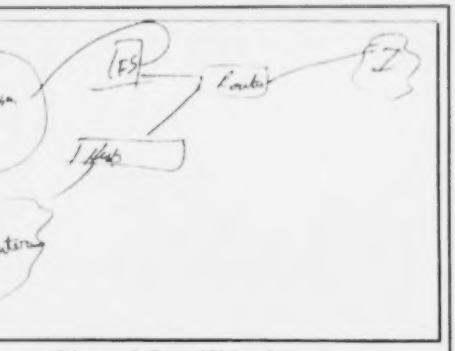



Diagram 1. Routed Network
Three segment network. There are two NICs in the file server.

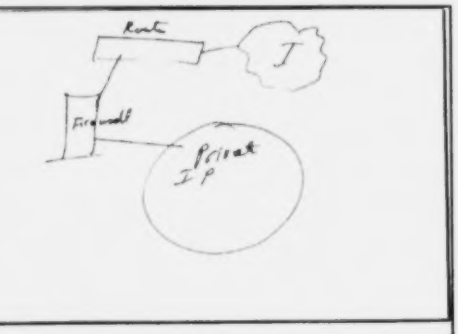


Diagram 3. Private IP Network
Only one cable segment.

| Cable Segment | IP Ready Hosts: Current | | IP Ready Hosts: New within 12 months | | IP Ready Hosts: Total by end of 12 months |
|---|---|---|---|---|---|
| 1 | 21 | + | 3 | = | 24 |
| 2 | 40 | + | 0 | = | 40 |
| 3 | 5 | + | 1 | = | 6 |
| 4 | | + | 25 | = | 25 |
| 5 | | + | | = | |
| 6 | | + | | = | |
| 7 | | + | | = | |
| 8 | | + | | = | |
| 9 | | + | | = | |
| 10 | | + | | = | |
| Grand Total of all hosts at end of 12 months: | | | | | 95 |

In the example above, there is currently only three cable segments. However, within the next 12 months the organization will be adding another lab of 25 computers. It will also be adding three computers to cable segment 1 and one additional computer to cable segment 3. The grand total for this organization within the next 12 months will be 95 computers.

### Line 32: Draw a network layout in the space provided below:

This diagram must include all the cable segments listed on Line 31a if this is a routed network. If you need more space, please use another piece of paper for the diagram and include it with the application form.

**Tip:** Look at Diagram 1 through Diagram 3 for the type of drawing LincOn is expecting. Please do not draw individual workstations. The purpose here is to get a visual idea of how your network is laid out and maybe to prevent any mistakes that would cause the processing of your application to be delayed.

## Section: Technical Contact

**Tip:** Try to keep this information current with LincOn as they will be the only people allowed to place trouble calls with LincOn. The personnel at LincOn will be able to fix your problems faster when the proper contacts are available (and can be contacted).

***Primary***

### Line 33: Name

Full name of individual given the responsibilities of planning, enacting, or maintaining the Internet connection between LincOn and your organization.

BEST COPY AVAILABLE

**Line 34: Title**
Professional title

**Line 35: Affiliation - Full-Time Staff / Part-Time Staff**
The Primary Technical Contact has to be a member of the applicant's organization. This information is invaluable in helping LincOn interact with your organization.

**Line 36: Daytime Phones and Descriptions**
Technology Contacts can move from building to building at any given time, so please enter as many phone numbers and where they connect to (such as library, high school lab, etc.) as possible. If the Technical Contact has a pager, please include it.

**Line 37: Nighttime Phone**
If a nighttime phone number is specified, efforts will be made to contact the Primary Technical Contact about any emergencies that arise during the evening hours. This information is private and will not be distributed.

**Line 38: E-mail Address (required)**
This information is private and will not be distributed.

***Secondary***
**Line 39: Name**
Full name of individual given the responsibilities of planning, enacting, or maintaining the Internet connection between LincOn and your organization.

**Line 40: Title**
Professional title

**Line 41: Daytime Phones and Descriptions**
Technology Contacts can move from building to building at any given time, so please enter as many phone numbers and where they connect to (such as library, high school lab, etc.) as possible. If the Technical Contact has a pager, please include it.

**Line 42: Nighttime Phone**
If a nighttime phone number is specified, efforts will be made to contact the Primary Technical Contact about any emergencies that arise during the evening hours. This information is private and will not be distributed.

**Line 43: E-mail Address (required)**
This information is private and will not be distributed.

**Line 44: Affiliation - Full-Time Staff / Part-Time Staff / Vendor / Consultant**
The Secondary Technical Contact can be a member of the organization's staff or can be a vendor or consultant to the organization. This information is invaluable in helping LincOn interact with the district.

If the technical contact is not a staff member, fill in the company information. If the Technical Contact is helping the district out, but is not officially a vendor, describe their interaction with the district on Company Name line.

## Section: Preparer's use only

**Line 45: Signature**
The LincOn Enrollment Application form will not be processed without this signature.

**Lines 46 through Line 52:**
If the application can not be processed, the preparer will be contacted to correct the problems. You must fill out at least the date, name, and phone number or the application will not be processed. All of these items are self-explanatory.

## Section: Fiscal Agent's use only

**Line 53: Signature**
The LincOn Enrollment Application form will not be processed without this signature.

**Lines 54 through Line 59:**
You must fill out at least the date, name, and phone number or the application will not be processed. All of these items are self-explanatory.

# Appendix A
## What Is a Domain Name and Do I Really Need One?

**Do I need to get a domain name?**
Any organization attaching to the LincOn Network which intends to run its own E-Mail Server or Web Server will need to have a domain name. If your organization is a public K-12 School and is not planning on setting up its own Servers, the Learning Technology Hubs can host your Web and e-mail accounts, but only for public K-12 schools. All other entities must handle their own e-mail and Web Servers. In any case, it will not hurt to have your own domain name. To be on the safe side, please call your local Area Learning Technology Hub and discuss this with their specialists. If you know for sure that you will not need a domain name, you can skip this form; otherwise, please read on.

**Before we start, how about some background on domain names?**
Computers on the Internet communicate with each other by numbers. Specifically, these numbers are referred to as Internet Protocol Numbers (IP Numbers). As humans, we prefer to communicate with names. We can use the phone system as an example here. We think in terms of "I'll give John a call," but the phone system uses (555) 555-1234 to actually connect you to John. If you don't know John's number, you can use the phone book or the operator to get John's number. Then you punch these numbers into the phone and you connect to John.

The Internet works very similar to the phone system. If your computer wants to talk to WWW.CNN.COM, it has to know the IP Number where CNN is located. So your computer calls another computer we call a DNS server (this computer is equivalent to an operator) and asks it for the IP Number of WWW.CNN.COM. This DNS server sends back something like 207.25.71.24. Your computer takes this number, dials it (not the real technical explanation), and connects you to WWW.CNN.COM.

**Why would I want a domain name?**
If you want to set up your own e-mail Server, you don't want to tell people to send mail to you at "johndoe@215.144.26.4." They're not going to remember 215.144.26.4 but they might remember Mail.LincolnHS.k12.il.us. Honestly, they might not be able to remember this either but the name Mail.LincolnHS.k12.il.us would be easier to guess than the IP Number. However you look at the full domain name, "johndoe@Mail.LincolnHS.k12.il.us" as a more human mailing address than "johndoe@215.144.26.4."

LincolnHS.k12.il.us is called a domain name. It's a group. Kind of like calling yourself the "Smiths." Inside the group "Smiths," you have Papa Smith, Mama Smith, and baby Samuel Smith. Inside the group LincolnHS.k12.il.us (substitute "domain" for "group" any time you want), you might have Mail.LincolnHS.k12.il.us which is the E-mail Server, WWW.LincolnHS.k12.il.us which is the Web Server, and ns.LincolnHS.k12.il.us for the domain name server. Do you have to use the "Mail," "WWW," or "ns" nomenclature exactly like me? Nope. You could have called your web server "WEB.LincolnHS.k12.il.us" just as easily as using the "WWW." The point here is that you have a domain or grouping of items under one main name. Are these the only domain prefixes available? Nope. You might decide to give your HP printer a name (HPL4.LincolnHS.k12.il.us) or maybe the computer that belongs to your secretary Brenda (Brenda.WS.LincolnHS.k12.il.us). In the last example, I even subdivided my domain into even another domain for workstations (WS.LincolnHS.k12.il.us).

You can even use the domain name to represent a specific computer without needing to put a prefix on it. Your mail server normally would look like Mail.LincolnHS.k12.il.us, but you may choose to just call it LincolnHS.k12.il.us. This is kind of like your boss just calling you Smith instead of using Bill, Mr. Smith, or Bill Smith. So even though your domain name might be LincolnHS.k12.il.us, you could still have your mail, Web or DNS server use the same name. One catch though, a name can only apply to one computer. If you have three separate computers, one for mail, one for Web, and one for DNS, then only one can use this name. However, if you put the mail, Web, and/or DNS software on the same computer, they all could use this name. Remember, a name can only be used for one computer.

The domain name gets registered so that anyone in the world can very easily send e-mail to or look at a Web page for "Lincoln High School that is part of the K-12 public school system in the state of Illinois which is part of the United States of America."

If there was a Lincoln Elementary School, the domain names for both organizations might look like:

LincolnHS.k12.il.us
**and**
LincolnEL.k12.il.us

Or, if the school district name was Lincoln, you might decide on something like:

HS.Lincoln.k12.il.us
**and**
EL.Lincoln.k12.il.us

**Who decides on the domain name and how do I let the rest of world know what it is?**
The IP Numbers are assigned to you by the LincOn Network Administration but the domain names can be picked by your organization (there are some rules to abide by though). These names need to be registered with an organization that will let the world know where you are (figuratively speaking). The LincOn Network is one entity with which you can register domain names. It will advertize your domain name to the rest of the world for you. If desired, your organization(s) can obtain this service from other companies or even run your own DNS server (the computer that would advertise your domain name to the world). The LincOn Network will manage domain names for public K-12 schools for free. Other organizations/companies may be charged a fee for this service. If you set up your own DNS server, you'll need an extra computer (new, not an old dust-covered computer), and you will need to have the technical talent to maintain it.

**What are the format rules?**
Domain names are regulated by several national and international groups. The standard for domain names for K-12 schools is to register under the "US Domain." For Illinois schools, this means that the name must end with "k12.il.us."

The LincOn Network has adopted the following naming convention for K-12 schools registering with the LincOn DNS servers:
<district>.<county>.k12.il.us
The advantages of this naming convention are
1) Structure the DNS service within the state,
2) Allow for multiple servers throughout the state, and
3) Provide unique naming within the state.

The <county> is the county name or an abbreviation of that name that has already been registered. The <district> entry could be any of the following:
1) District number, proceeded by a "d." The district number is unique within each county of the state. Using "John Doe High School District 255" in Lake county as an example, their domain name under this method would be "d255.lake.k12.il.us."
2) District name or some accepted abbreviation. Using the "John Doe Community Unit School District 255" example, they might commonly use "JDCUSD255" for their name. This would translate into "jdcusd255.lake.k12.il.us." NOTE: If this name or abbreviation is already taken within that county, the domain name would not be unique and an alternative name must be used.
3) School name or some accepted abbreviation. Some districts might choose to register each of their schools directly under the county instead of under the district, eliminating the reference to the district. For example, a school named "Lincoln High School" which commonly goes by "LHS" in the above-referenced district might choose either "lincoln.lake.k12.il.us" or "lhs.lake.k12.il.us." Again, if the name or abbreviation chosen already exists, an alternative name must be selected.

**I need a domain name. What do I do?**
To get a domain name, fill out the information on the LincOn Enrollment Application in the section entitled "Domain Name Request." When your application is processed, you will be assigned domain name. With the receipt of your final package from the LincOn Network that tells you when to expect everything, you will also be notified as to your final domain name. If all of your domain name selections are already selected by other organizations, your will be contacted by a LincOn representative and asked to select a different domain name. The LincOn representative can also help you with your selection.

# Appendix B
## Common Questions

**How do I attach to the Internet?**
There are several methods of connecting to the Internet. These range from dial-up connections (what most home users use) to Dial-On-Demand connections (such as ISDN) to Full-Time (direct) connections, such as leased lines (56kb/s and T1 lines).

The hardware required to attach to the Internet depends on the type of connection. A dial-up connection is made using a modem connected to a computer (and usually only used for the single computer to which it is connected). An ISDN line can be connected to a single computer using an adapter card or to your Local Area Network (LAN) by use of an ISDN modem and router. A 56kb/s leased-line connection uses DSU and a router to attach your LAN to the Internet. A T1 leased-line connection uses a CSU/DSU (sometimes called a TSU) and a router to attach your LAN to the Internet.

The hardware mentioned above will be used to physically connect you to the Internet. Next, your computers need to be able to speak to the Internet. As humans, we use languages like English, French and Spanish to talk to one another. We also use sign language, body language, eye contact and hand movements to communicate. In computer terms, these are the protocols we use to communicate. Computers on your network use protocols to communicate with one and another. These might be IPX, SNA, and Netbios. The Internet uses a protocol called Internet Protocol (IP). Specifically, the Internet used an entire suite of protocols called Transmission Control Protocol (TCP), so the "language of the Internet" is then TCP/IP.

Nearly every Operating System today can communicate using TCP/IP, but it may not be installed or configured on the computers you are using this minute. Therefore, you will need to make your machines talk TCP/IP if you want them to talk to the Internet. Like humans, computers can be bilingual. They can continue to talk their native protocol like SNA or Netbios while also talking IP to the Internet. This can be accomplished in general by adding some new software to the computers you want to communicate with the Internet. At times this can be costly or simply impossible because the equipment just cannot run the new software.

In a more specific sense, to connect to the Internet through the LincOn Network, fill out the LincOn Enrollment Application. The LincOn personnel will be able to help you with the process of attaching to the Internet.

**Do I need a network to connect to the Internet?**
First, let's define a network. A network is two or more computers connected together to share information or resources. So, if your intent is to connect multiple computers to the Internet, yes, you need a network. To be real specific, you will need a network that can transport TCP/IP in some fashion.

**Do I need a file server to connect to the Internet?**
No, you do not need a file server to connect to the Internet. Any type of network topology that supports TCP/IP can connect to the Internet. A peer-to-peer network (a network that does not have a file server) can talk to the Internet.

**What is TCP/IP?**
Transmission Control Protocol/Internet Protocol (TCP/IP) is "the language of the Internet." TCP/IP is a platform-independent means of communication. This means that PC-compatible computers, Unix based computers, and Apple Macintosh computers can all communicate with each other. TCP/IP is actually a protocol suite that defines standard means of communicating between computers, and the specific services requested of that computer. Examples of common protocols in the TCP/IP suite are http (WEB), FTP (copy files), SMTP and POP (e-mail), IRC (Chat), and Ping.

**What about TCP/IP on my Novell Netware Network?**
Netware's default communication protocol is IPX/SPX, but just like humans it can be bilingual. Computers and network can also. There are several version of Netware so let's talk about the latest ones, versions Netware 3.12 through IntraNetware 4.11.

Novell has supplied the means to load TCP/IP for communications. Do note, though, a file server is not usually needed for Internet connectivity. In other words, your Netware server may not need to have TCP/IP loaded. But, the workstations that

are to communicate on the Internet have to have TCP/IP loaded on them.

**What is a Web Server, and can I set up my own?**
A Web Server is simply a program that runs on a computer, listening for http requests from other computers and replying to those requests. Web Server software is available for nearly every Network Operating System. Microsoft NT Server and Novell IntraNetware both come with Web Server software. There will be some administrative tasks involved with running your own Web Server but for small Web sites these are not significant.

**Note:** You can set up your own Web Server, but don't forget to let LincOn know about it. The main reason for this is proper DNS services. Without a DNS entry for your Web Server, the only way anyone will be able to get to your Web site is through the numeric IP address.

**What is an E-mail Server and can I set up my own?**
An E-mail Server is similar to a Web Server excepting function. You can set up your own E-mail Server, but again, you will need to let the LincOn know about it to make sure there is an appropriate DNS entry for your mail server.

**I still have questions...**
If you still have questions, you can contact LincOn administration at 217-782-4313, or your area's Learning Technology Hub. Contact information can be found in Appendix C of your LincOn Enrollment Application booklet.

# Appendix C

## Contact Information Table

| County | Hub | Region |
|---|---|---|
| Adams | III | 1 |
| Alexander | VI | 2 |
| Bond | V | 3 |
| Boone | II | 4 |
| Brown | III | 46 |
| Bureau | II | 28 |
| Calhoun | V | 40 |
| Carroll | II | 8 |
| Cass | III | 46 |
| Champaign | IV | 9 |
| Christian | V | 10 |
| Chicago | VII | |
| Clark | IV | 11 |
| Clay | VI | 12 |
| Clinton | V | 13 |
| Coles | IV | 11 |
| Cook | I | 14 |
| Crawford | VI | 12 |
| Cumberland | IV | 11 |
| De Kalb | II | 16 |
| DeWitt | IV | 17 |
| Douglas | IV | 11 |
| DuPage | I | 19 |
| East Cook | I | |
| Edgar | IV | 11 |
| Edwards | VI | 20 |
| Effingham | V | 3 |
| Fayette | V | 3 |
| Ford | IV | 9 |
| Franklin | VI | 21 |
| Fulton | III | 22 |
| Gallatin | VI | 20 |
| Greene | V | 40 |
| Grundy | I | 24 |
| Hamilton | VI | 25 |
| Hancock | III | 26 |
| Hardin | VI | 20 |
| Henderson | III | 27 |
| Henry | II | 28 |
| Iroquois | IV | 32 |
| Jackson | VI | 30 |
| Jasper | VI | 12 |
| Jefferson | VI | 25 |
| Jersey | V | 40 |
| Jo Daviess | II | 8 |
| Johnson | VI | 2 |
| Kane | I | 31 |
| Kankakee | IV | 32 |
| Kendall | I | 24 |
| Knox | III | 33 |
| LaSalle | II | 35 |
| Lake | | 34 |
| Lawrence | VI | 12 |
| Lee | II | 47 |

| County | Hub | Region |
|---|---|---|
| Livingston | IV | 17 |
| Logan | IIV | 38 |
| Macon | IV | 39 |
| Macoupin | V | 40 |
| Madison | V | 41 |
| Marion | VI | 13 |
| Marshall | II | 43 |
| Mason | III | 38 |
| Massac | VI | 2 |
| McDonough | III | 26 |
| McHenry | I | 44 |
| McLean | IV | 17 |
| Menard | III | 38 |
| Mercer | III | 27 |
| Monroe | V | 45 |
| Montgomery | V | 10 |
| Morgan | III | 46 |
| Moultrie | IV | 11 |
| North Cook | I | 14 |
| Ogle | II | 47 |
| Peoria | III | 48 |
| Perry | VI | 30 |
| Piatt | IV | 39 |
| Pike | III | 1 |
| Pope | VI | 20 |
| Pulaski | VI | 2 |
| Putnam | II | 43 |
| Randolph | V | 45 |
| Richland | VI | 12 |
| Rock Island | II | 49 |
| St. Clair | V | 50 |
| Saline | VI | 20 |
| Sangamon | III | 51 |
| Schuyler | III | 22 |
| Scott | III | 46 |
| Shelby | IV | 11 |
| Stark | II | 28 |
| Stephenson | II | 8 |
| South Cook | I | 14 |
| Tazewell | III | 53 |
| Union | VI | 2 |
| Vermilion | IV | 54 |
| Wabash | VI | 20 |
| Warren | III | 27 |
| Washington | V | 13 |
| Wayne | VI | 20 |
| West Cook | I | 14 |
| White | VI | 20 |
| Whiteside | II | 55 |
| Will | I | 56 |
| Williamson | VI | 21 |
| Winnebago | II | 4 |
| Woodford | II | 43 |

## ISBE

**Illinios State Board of Education**
LincOn Administration, S395
100 N. First Street
Springfield, IL 62777-0001
Phone: (217) 782-4313
Fax: (217) 782-1976

## Learning Technology Hubs

**Area 1**
1 S. 331 Grace Street
Lombard, IL 60148
Phone: (630) 495-3880
Fax: (630) 495-3885

**Area II**
119 W. Madison St., Room 102
Ottawa, IL 61350
Phone: (815) 434-0780
Fax: (815) 434-2453

**Area III**
10112 W. Dubois Road
Brimfield, IL 61517
Phone: (309) 673-2374
Phone: (800) 269-7107
Fax: (309) 673-1369

**Area IV**
200 S. Fredrick St., Suite 305
Rantoul, IL 61866
Phone: (217) 893-1431, x120
Fax. (217) 892-4637

**Area V**
200 Clay Street
Edwardsville, IL 62025
Phone: (618) 692-6200, x4609
Fax: (618) 659-9338

**Area VI**
1416 Walnut Street
Murphysboro, IL 62966
Phone: (618) 684-8112
Fax: (618) 684-2999

**Area VII**
1819 W. Pershing Road -4C(13)
Chicago, IL 60609
Phone: (773) 535-8097
Fax: (773) 535-7078

## Regional Offices of Education

**Region 1**
Honorable Raymond Scheiter
507 Vermont Street
Quincy, IL 62301
Phone: (217) 277-2080
Fax: (217) 277-2092

**Region 2**
Honorable Andrea M. Brown
17 Rustic Campus Drive
Ullin, IL 62992
Phone: (618) 634-2292
(800) 322-1239
Fax: (618) 634-2294

**Region 3**
Honorable Delbert Maroon
300 South 7th Street
Vandalia, IL 62471
Phone: (618) 283-5011
Fax: (618) 283-5013

**Region 4**
Honorable Richard Fairgrieves
300 Heart Boulevard
Loves Park, IL 61111-7516
Phone: (815) 636-3060
Fax: (815) 636-3069

**Region 8**
Honorable John B. Lang
500 North Rush Street
Stockton, IL 61085
Phone: (815) 947-3810
Fax: (815) 947-2717

**Region 9**
Honorable Martin L. Barrett
200 South Fredrick Street
Rantoul, IL 61866-0919
Phone: (217) 893-3219
Fax: (217) 893-0024

**Region 10**
Honorable Greg Springer
101 South Main Street
Taylorville, IL 62568
Phone: (217) 824-4730
Fax: (217) 824-2464

**Region 11**
Honorable John E. McNary
730 7th Street, Suite A
Charleston, IL 61920
Phone: (217) 348-0151
Fax: (217) 348-0171

**Region 12**
Honorable Samuel T. White
Third Floor, Richland
County Courthouse
103 West Main Street
Olney, IL 62450-2193
Phone: (618) 392-4631
Fax: (618) 392-3993

**Region 13**
Honorable Danny L. Garrett
930-B Fairfax Street
Carlyle, Illinois 62231-1811
Phone: (618) 594-2432
Fax: (618) 594-7192

**Region 14**
Honorable Lloyd W. Lehman
10110 Gladstone
Westchester, IL 60154
Phone: (708) 865-9330
Fax: (708) 865-9338

**Region 16**
Honorable Thomas R. Weber
245 W. Exchange St., Suite 2
Sycamore, IL 60178
Phone: (815) 895-3096
Fax: (815) 895-4847

**Region 17**
Honorable Eugene P. Jontry
201 East Grove
P.O. Box 3125
Bloomington, IL 61702-3125
Phone: (309) 888-5120
Fax: (309) 828-7575

**Region 19**
Honorable Berardo J. Desimone
421 N. County Farm Road
Wheaton, IL 60187-3978
Phone: (630) 682-7150
Fax: (630) 682-7773

**Region 20**
Honorable Linda L. Blackman
512 North Main Street
Harrisburg, IL 62946
Phone: (618) 253-5581
Fax: (618) 252-8472

**Region 21**
Honorable Barry Kohl
202 West Main
Benton, IL 62812-0415
Phone: (618) 438-9711
Fax: (618) 435-2861

**Region 22**
Honorable Gary L. Grzanich
100 North Main
P.O. Box 307
Lewistown, IL 61542
Phone: (309) 547-3041
Fax: (309) 547-3326

**Region 24**
Honorable Richard Krase
1320 Union Street
Morris, IL 60450
Phone: (815) 941-3247
Fax: (815) 942-5384

**Region 25**
Honorable Paul E. Cross
Courthouse
900 Broadway Street
Mount Vernon, IL 62864
Phone: (618) 244-8040
Fax: (618) 244-8073

**Region 26**
Honorable Robert Baumann
130 1/2 South Lafayette
P.O. Box 556
Macomb, IL 61455
Phone: (309) 837-4821
Fax: (309) 837-2887

**Region 27**
Honorable Roger Birkhead
200 West Broadway
Monmouth, IL 61462-1750
Phone: (309) 734-6822
Fax: (309) 734-2452

**Region 28**
Honorable Bruce Dennison
313 N. Canal Street
Annawan, IL 61234
Phone: (309) 935-6789
Fax: (309) 935-6784

**Region 30**
Honorable Donald L. Brewer
1001 Walnut Street
Murphysboro, IL 62966
Phone: (618) 687-7290
Fax: (618) 687-7296

**Region 31**
Honorable Clem Mejia
719 S. Batavia Ave., Building C
Geneva, IL 60134-3077
Phone: (630) 232-5955
Fax: (630) 208-5115

**Region 32**
Honorable Kathleen Pangle
189 East Court St., Suite 600
Kankakee, IL 60901
Phone: (815) 937-2950
Fax: (815) 937-2921

**Region 33**
Honorable Robert O. Johnson
161 South Cherry Street
P.O. Box 430
Galesburg, IL 61401
Phone: (309) 345-3828
Fax: (309) 343-2677

**Region 34**
Honorable Edward J. Gonwa
33 North County Street Rm 400
Waukegan, IL 60085
Phone: (847) 360-6313
Fax: (847) 360-8180

**Region 35**
Honorable William G. Novotney
119 West Madison, Room 102
Ottawa, IL 61350-5014
Phone: (815) 434-0780
Fax: (815) 434-2453

**Region 38**
Honorable George D. Janet
601 Broadway , Room 21
P.O. Box 460
Lincoln, IL 62656-2768
Phone: (217) 732-8388
Fax: (217) 735-1569

**Region 39**
Honorable David O. Cooprider
1690 Huston Drive
Decatur, IL 62526
Phone: (217) 872-3721
Fax: (217) 872-0239

**Region 40**
Honorable Russell G. Masinelli
220 North Broad Street
Carlinville, IL 62626
Phone: (217) 854-4016
Fax: (217) 854-2032

**Region 41**
Honorable Harry A. Briggs
Madison County Adm. Bldg.
157 N. Main Street, Suite 438
P.O. Box 600
Edwardsville, IL 62025
Phone: (618) 692-6200, ext.4530
Fax: (618) 692-7018

**Region 43**
Honorable Iner A. Anderson
214 North 4th Street
P.O. Box 289
Hennepin, IL 61327
Phone: (815) 925-7381
Fax: (815) 925-7915

**Region 44**
Honorable Donald R. Englert
2200 North Seminary Avenue
Woodstock, IL 60098
Phone: (815) 334-4475
Fax: (815) 338-0475

**Region 45**
Honorable Faye J. Hughes
107 East Mill Street
Waterloo, IL 62298
Phone: (618) 939-5650
Fax: (618) 939-5332

**Region 46**
Honorable Donald L. Kording
110 North West Street
Jacksonville, IL 62650
Phone: (217) 243-1804
Fax: (217) 243-5354

**Region 47**
Honorable Thomas Coffey
7772 Clinton Street, Grand Detour
Dixon, IL 61021
Phone: (815) 652-2054
Fax: (815) 652-2053

**Region 48**
Honorable Gerald M. Brookhart
County Courthouse, Room 503
324 Main St.
Peoria, IL 61602
Phone: (309) 672-6906
Fax: (309) 672-6053

**Region 49**
Honorable Joseph A. Vermeire
3430 23rd Avenue
Moline, IL 61265
Phone: (309) 736-1111
Fax: (309) 736-1127

**Region 50**
James "Jed" Deets
500 Wilshire Drive
Belleville, IL 62223
Phone: (618) 397-8930
Fax: (618) 397-8928

**Region 51**
Honorable Helen C. Tolan
Sangamon County Complex
200 South Ninth St., Room 303
Springfield, IL 62701-1629
Phone: (217) 753-6620
Fax: (217) 735-3166

**Region 53**
Honorable Thomas J. Innis
Tazewell Building
414 Court
P.O. Box 699
Pekin, IL 61555-0699
Phone: (309) 477-2290
Fax: (309) 347-4621

**Region 54**
Honorable Jim Trask
200 S. College, Suite B
Danville, IL 61832
Phone: (217) 431-2668
Fax: (217) 431-2671

**Region 55**
Honorable Gary Steinert
1001 West 23rd St.
Sterling, IL 61081
Phone: (815) 625-1495
Fax: (815) 625-1625

**Region 56**
Honorable Richard P. Duran
302 N. Chicago Street
Joliet, IL 60432-4059
Phone: (815) 740-8360
Fax: (815) 740-4788

ILLINOIS STATE BOARD OF EDUCATION
100 North First Street
Springfield, Illinois 62777-0001

# LincOn
# ADDITIONAL BUILDINGS/ORGANIZATIONS

## MEMBERSHIP INFORMATION

1. LINCON MEMBERSHIP ID

## ENTITY INFORMATION

2. ☐ New ☐ Delete ☐ Modify

3. SITE NAME
4. SITE CONTACT'S NAME
5. SITE CONTACT'S TITLE
6. ADDRESS 1
7. ADDRESS 2
8. CITY, STATE, ZIP CODE
9. SITE CONTACT'S E-MAIL ADDRESS
10. PHONE
11. FAX

2. ☐ New ☐ Delete ☐ Modify

3. SITE NAME
4. SITE CONTACT'S NAME
5. SITE CONTACT'S TITLE
6. ADDRESS 1
7. ADDRESS 2
8. CITY, STATE, ZIP CODE
9. SITE CONTACT'S E-MAIL ADDRESS
10. PHONE
11. FAX

2. ☐ New ☐ Delete ☐ Modify

3. SITE NAME
4. SITE CONTACT'S NAME
5. SITE CONTACT'S TITLE
6. ADDRESS 1
7. ADDRESS 2
8. CITY, STATE, ZIP CODE
9. SITE CONTACT'S E-MAIL ADDRESS
10. PHONE
11. FAX

2. ☐ New ☐ Delete ☐ Modify

3. SITE NAME
4. SITE CONTACT'S NAME
5. SITE CONTACT'S TITLE
6. ADDRESS 1
7. ADDRESS 2
8. CITY, STATE, ZIP CODE
9. SITE CONTACT'S E-MAIL ADDRESS
10. PHONE
11. FAX

2. ☐ New ☐ Delete ☐ Modify

3. SITE NAME
4. SITE CONTACT'S NAME
5. SITE CONTACT'S TITLE
6. ADDRESS 1
7. ADDRESS 2
8. CITY, STATE, ZIP CODE
9. SITE CONTACT'S E-MAIL ADDRESS
10. PHONE
11. FAX

# LincOn Additional Buildings and Organizations Instructions

Make copies of this form if more than five additional buildings will be enrolling into the LincOn Network with the main LincOn Enrollment Application. Include this form(s) with your LincOn Enrollment Application when it is submitted.

## Section: Membership Information

**Line 1: LincOn Membership ID**
If you are already a LincOn member, enter your membership ID here. If you are applying for membership for the first time, then leave this field blank and submit this form with the LincOn Enrollment Application.

## Section: Entity Information

**Line 2: New / Delete / Modify**
Check the appropriate box for this building's information. Use this form when information changes about a building.

**Line 3: Site Name**
This is the full name of the organization that is part of the Fiscal Agent that is applying for admissions to the LincOn Network.

**Line 4: Site Contact's Name**
The name of the person LincOn should contact if any problems arise where a LincOn representitive should need information or site access.

**Line 5: Site Contact's Title**
Professional title.

**Line 7 through 8: Address, City, State, Zip**
This needs to be the street address of the building. P.O. Boxes will not be accepted.

**Line 9: Site Contact's E-mail Address (required field)**
This information is private and will not be distributed.

**Line 10: Phone**
Fax number for normal office hours.

**Line 11: Fax**
Fax number for normal office hours.

ILLINOIS STATE BOARD OF EDUCATION
100 North First Street
Springfield, Illinois 62777-0001

# LincOn
# IP REQUEST APPLICATION

## MEMBERSHIP INFORMATION

1. LINCON MEMBERSHIP ID

## FLAT NETWORK IP REQUEST

**Host count for IP Gateway/Private IP/ Bridged/Flat/Switched Network**

| | CURRENT | | NEW WITHIN 12 MONTHS | | TOTAL BY END OF 12 MONTHS |
|---|---|---|---|---|---|
| 2. IP Addresses requested? | | + | | = | |
| 3. Internet-connecting hosts? | | + | | = | |

## ROUTED NETWORK IP REQUEST

| | IP-Ready Hosts | | | | | Cable Segment Description |
|---|---|---|---|---|---|---|
| | CURRENT | | NEW WITHIN 12 MONTHS | | TOTAL BY END OF 12 MONTHS | |
| 4 | | + | | = | | |
| 5 | | + | | = | | |
| 6 | | + | | = | | |
| 7 | | + | | = | | |
| 8 | | + | | = | | |
| 9 | | + | | = | | |
| 10 | | + | | = | | |
| 11 | | + | | = | | |
| 12 | | + | | = | | |
| 13 | | + | | = | | |
| 14 | | + | | = | | |
| 15 | | + | | = | | |
| 16 | | + | | = | | |
| 17 | | + | | = | | |
| 18 | | + | | = | | |
| 19 | | + | | = | | |
| 20 | | + | | = | | |
| 21 | | + | | = | | |
| 22 | | + | | = | | |
| 23 | | + | | = | | |
| 24 | | + | | = | | |
| 25 | | + | | = | | |
| 26 | | + | | = | | |
| 27 | | + | | = | | |
| 28 | | + | | = | | |
| 29 | | + | | = | | |
| 30 | | + | | = | | |
| 31 | | + | | = | | |
| 32 | | + | | = | | |
| **GRAND TOTAL of all hosts at end of 12 months** | | | | | | |

## PREPARER'S USE ONLY

*I declare that I have examined the information contained within this form and to the best of my knowledge find it to be an accurate representation of the organization's needs.*

33. SIGNATURE

34. DATE

35. NAME

36. TITLE

37. ORGANIZATION

38. E-MAIL ADDRESS

39. PHONE

40. FAX

33

# LincOn IP Request Application Instructions

Use this LincOn IP Request Form when you need more than ten cable segments or when you need to request more IP Addresses from the LincOn Network.

## Section: Membership Information

### Line 1: LincOn Membership ID

If you are already a LincOn member, enter your membership ID here. If you are applying for membership for the first time, then leave this field blank and submit this form with the LincOn Enrollment Application.

## Section: Flat Network IP Request

Use this section only if you have one of the following types of networks: IP Gateway, Private IP, Bridged, Flat, or Switched.

### Line 2: IP Addresses requested

This is the total number of real IP Addresses needed. If you have a firewall, IP Gateway, or Private IP network, don't forget to include any addition real IP addresses that might be needed for such things as a video conference.

### Line 3: Internet Connecting Hosts

This is a count of every machine that will be accessing the Internet. Even if you are planning on using IP-IPX Gatewaying or Private IP, every machine or device that will access the Internet needs to be counted.

## Section: Routed Network IP Request

### Lines 4 through Line 32: Cable Segment Information

There are three required columns to fill in for IP-ready hosts. These columns are "Current," "New with 12 months," and "Total by end of 12 months." The fourth column, "Cable Segment Descriptions," is for your own use in documenting your network.

### Column "Current IP-Ready Hosts"

This column is the number of computers, printers, servers, or any other device that can accept an IP Address right now that is on a given cable segment. This does NOT include any new computers that will be purchased or any computers that will be upgraded at a later date to be able to use IP Addresses.

### Column "New within 12 months IP-Ready Hosts"

This column is the ADDITIONAL number of computers, printers, servers, or any other device that can accept an IP Address that you plan on buying in the next 12 months. This number does NOT INCLUDE the number specified in the Current IP-Ready Hosts column.

### Column "Total by end of 12 months IP- Ready Host"

This column is the addition of the first column (Current IP-Ready Hosts) and the second column (New within 12 months IP-Ready Hosts).

### Grand total of all hosts at end of 12 months

Don't forget to total the "Total by End of 12 Months IP-Ready Host" column and put the answer into the "Grand Total of all hosts at end of 12 months" answer box.

## Section: Preparer's use only.

### Line 33: Signature

The LincOn IP-Request Application will not be processed without this signature.

### Line 34 through Line 40:

These lines must be printed or typed. If the application cannot be processed, the preparer will be contacted to correct the problems. You must fill out at least the date, name, and phone number or the application will not be processed. All of these items are self-explanatory.

ILLINOIS STATE BOARD OF EDUCATION
100 North First Street
Springfield, Illinois 62777-0001

# LincOn
# DIAL-UP ROUTER INFORMATION

## MEMBERSHIP INFORMATION

| 1. LINCON MEMBERSHIP ID | 2. BORDER ROUTER SERIAL NUMBER |
|---|---|
| | |

## TACACS INFORMATION

☐ YES ☐ NO 3. If you are submitting this with the LincOn Enrollment Application, do you wish to be quoted the modems that you will use with your access server/router?

***If Yes***, specify the number of modems you will require:

A. Quantity of single stand-alone modems

B. Quantity of 8 modem rack-mountable units

C. Quantity of 16 modem rack-mountable units

☐ YES ☐ NO 4. If you are submitting this form with the LincOn Enrollment Application, should ISBE auto-assign an IP Address for your TACACS Server?

***If Yes***, will the TACACS Server run on the same machine as:

- ☐ DNS Server
- ☐ E-Mail Server
- ☐ Web Server
- ☐ Dedicated Machine
- ☐ Other *(describe)*

5. If you are submitting this form after becoming a member of the LincOn Network, what is the IP Address of the TACACS Server

# LincOn Dial-up Router Information

This form is used to supply LincOn with information needed to configure your dial-up access server/router. You can also use this form to order modems only when this form is submitted with the LincOn Enrollment Application.

Please note that if your organization will be setting up a dial-up access server/router, you will need to run a TACACS server.

## Section: Membership Information

**Line 1: LincOn Membership ID**
If you are already a LincOn member, enter your membership ID here. If you are applying for membership for the first time, then leave this field blank and submit this form with the LincOn Enrollment Application.

**Line 2: Border Router Serial Number**
What is the serial number of the LincOn Border Router that will become your Access Server? LincOn personnel will configure only border routers.

## Section: TACACS Information

**Line 3: If you are submitting this with the LincOn Enrollment Application, do you wish to be quoted the modems that you will use with your access server/router?**
Along with the quote for the access server/router, telecommunications lines, and all applicable LincOn charges, LincOn can get you a quote on the modems that will use for your dial-up access. This information will appear on your enrollment quote. No equipment will be ordered until your organization submits a Purchase Order.

**Line 3a: If YES, specify the number modems you will require.**
Currently LincOn is recommending US Robotics 33.6 modems. You can get a quote for individual modems or as one of the two rack-mountable options.

**Line 4: If you are submitting this form with the LincOn Enrollment Application, should ISBE auto-assign an IP Address for your TACACS Server?**
If Yes, when IP Addresses are assigned, one will be assigned by LincOn to be used as the IP Address for your organization's TACACS Server. This information will be sent to the **Primary Technical Contact**. If you answer No, your DNS entries can not be made at assignment time and will need to be processed later. You will be sent a DNS Entry Request Form with your IP Address range. Fill in the host names with the IP Addresses you are assigning them to and return this form to the address specified in the form's instructions.

**Line 4a: If YES, will the TACACS Server software be running on the same hardware as another server?**
This is used to determine if an IP address will be the same as that of another machine. If this software will be the only server software on a particular computer, then select Dedicated Machine.

**Line 5: If you are submitting this form after becoming a member of the LincOn Network, what is the IP Address of the TACACS Server?**
If you are setting up a TACACS server after becoming a LincOn member, you will have a range of IP Addresses that you are using for your computers. You will either be using an existing computer for the TACACS Server or you will be installing a new computer. Whichever the case, what is the IP Address you will be using for this server? LincOn needs this information so that the border router can be configured correctly.

**ILLINOIS STATE BOARD OF EDUCATION**
100 North First Street
Springfield, Illinois 62777-0001

# LincOn
# ADDITIONAL CONTACTS

## MEMBERSHIP INFORMATION

1 LINCON MEMBERSHIP ID

## CONTACT INFORMATION

4 NAME | 5 TITLE

2 ☐ New ☐ Delete ☐ Modify

6 DAYTIME PHONE | 7 DESCRIPTION

8 AFFILIATION *(select only one)* | 9 E-MAIL ADDRESS

3 ☐ Primary Technical ☐ Secondary Technical ☐ Domain Name Billing ☐ Domain Name Administration ☐ Domain Name Technical ☐ WEB Server Technical ☐ E-Mail Server Technical

☐ Full-Time Staff ☐ Part-Time Staff ☐ Vendor/Consultant

*If Vendor/Consultant, please fill out the following information:*

10 COMPANY NAME | 11 FAX

12 ADDRESS 1 | 13 ADDRESS 2

14 CITY, STATE, ZIP CODE

4 NAME | 5 TITLE

2 ☐ New ☐ Delete ☐ Modify

6 DAYTIME PHONE | 7 DESCRIPTION

8 AFFILIATION *(select only one)* | 9 E-MAIL ADDRESS

3 ☐ Primary Technical ☐ Secondary Technical ☐ Domain Name Billing ☐ Domain Name Administration ☐ Domain Name Technical ☐ WEB Server Technical ☐ E-Mail Server Technical

☐ Full-Time Staff ☐ Part-Time Staff ☐ Vendor/Consultant

*If Vendor/Consultant, please fill out the following information:*

10 COMPANY NAME | 11 FAX

12 ADDRESS 1 | 13 ADDRESS 2

14 CITY, STATE, ZIP CODE

4 NAME | 5 TITLE

2 ☐ New ☐ Delete ☐ Modify

6 DAYTIME PHONE | 7 DESCRIPTION

8 AFFILIATION *(select only one)* | 9 E-MAIL ADDRESS

3 ☐ Primary Technical ☐ Secondary Technical ☐ Domain Name Billing ☐ Domain Name Administration ☐ Domain Name Technical ☐ WEB Server Technical ☐ E-Mail Server Technical

☐ Full-Time Staff ☐ Part-Time Staff ☐ Vendor/Consultant

*If Vendor/Consultant, please fill out the following information:*

10 COMPANY NAME | 11 FAX

12 ADDRESS 1 | 13 ADDRESS 2

14 CITY, STATE, ZIP CODE

## PREPARER'S USE ONLY

*I declare that I have examined the information contained within this form and to the best of my knowledge find it to be an accurate representation of the organization's needs.*

15 SIGNATURE | 19 ORGANIZATION

16 DATE | 20 E-MAIL ADDRESS

17 NAME | 21 PHONE

18 TITLE | 22 FAX





BEST COPY AVAILABLE

# LincOn Additional Contacts Instructions

Use this form to update your contact information with the LincOn Network. Make copies of this form if more than four additional contacts need to be specified. Include this form(s) with your LincOn Enrollment Application when it is submitted.

## Section: Membership Information

**Line 1: LincOn Membership ID**
If you are already a LincOn member, enter your membership ID here. If you are applying for membership for the first time, then leave this field blank and submit this form with the LincOn Enrollment Application.

## Section: Contact Information

**Line 2: New / Delete / Modify**
Check the appropriate box for this contact information. Use this form when information changes about the contacts.

**Line 3: Contact Type**
Choose between Primary and Secondary Technical contacts; Domain Name Billing, Administration, and Technical contacts; and Web Server and E-mail Server Technical contacts.

**Line 4: Name**
Full name of individual given the responsibilities for the category you are entering.

**Line 5: Title**
Professional title

**Line 6 and Line 7: Daytime Phone and Description**
Technology contacts can move from building to building at any given time, so please enter the most likely locations where this person can be contacted. Specify where these number will dial into (i.e., office, pager, home phone, cell phone, etc.) using the Description field.

**Line 8: Affiliation - Full-Time Staff / Part-Time Staff / Vendor / Consultant**
The Primary Technical Contact cannot be a vendor or consultant. This person must be a member of the staff. For any other type of contact other than Primary Technical, the contact can be a member of the organization's staff or a vendor / consultant to the organization. This information is invaluable in helping LincOn interact with your organization.

**Line 9: E-Mail Address (Required)**
This information will not be distributed.

**Line 10 through Line 14: Vendor / Consultant Information**
If the technical contact is not a staff member, then fill in the company information. If the technical contact is helping the district out, but is not officially a vendor, describe the contact's interaction with the district on Company Name line.

## Section: Preparer's use only

**Line 15: Signature**
The LincOn IP Request Application will not be processed without the preparer's signature.

**Line 16 through Line 22:**
These lines must be printed or typed. If the application cannot be processed, the preparer will be contacted to correct the problems. You must fill out at least the date, name, and phone number or the application will not be processed. All of these items are self-explanatory.

# LincOn Management Release Agreement

## Section I. Member or Member Applicant Information

LincOn Membership ID: _____ - _____
Tax-Exempt Number: _____
FEIN Code: _____

Name: _____
Address: _____
City: _____ State: IL Zip: _____
Phone: ( ) - _____
Fax: ( ) - _____

## Section II. Purpose of LincOn Management Release Agreement

The purpose of this agreement is to transfer all of the responsibilities listed below from LincOn staff to the member. Responsibilities include but are not limited to:

* maintaining router configurations,
* monitoring connection status,
* maintaining wide area connections into the LincOn backbone,
* making changes to member's router as needed to insure an active connection,
* processing trouble tickets for down communications lines, lines
* working with the Wide Area Network Provider to fix any connections that are experiencing problems.

## Section III. LincOn Responsiblities after Releasing Management to Member

LincOn will monitor router port status at the LincOn Distribution site through which the member is attached. No attempt will be made to contact the Wide Area Communication Providers to resolve any problems.

Occasionally, LincOn will be making changes to the infrastructure of the network that will require changes at the member's facilities. All planned LincOn actions that require members to complete changes on their equipment prior to, simultaneously, or after LincOn changes will be delivered in writing to that member at least two weeks before any LincOn action.

In cases where emergency changes need to be made to the infrastructure of the LincOn network where the member's connection is affected, efforts will be made to contact the LincOn Member's Technical Contact as supplied by the member in the LincOn Enrollment Application by all means available.

## Section IV. Member Responsibilities after Releasing Management to Member

Member will assume all responsibilities listed in Section II. The member will also provide view access into the member's border router.

The member is waiving ISBE/LincOn router management and troubleshooting assistance.

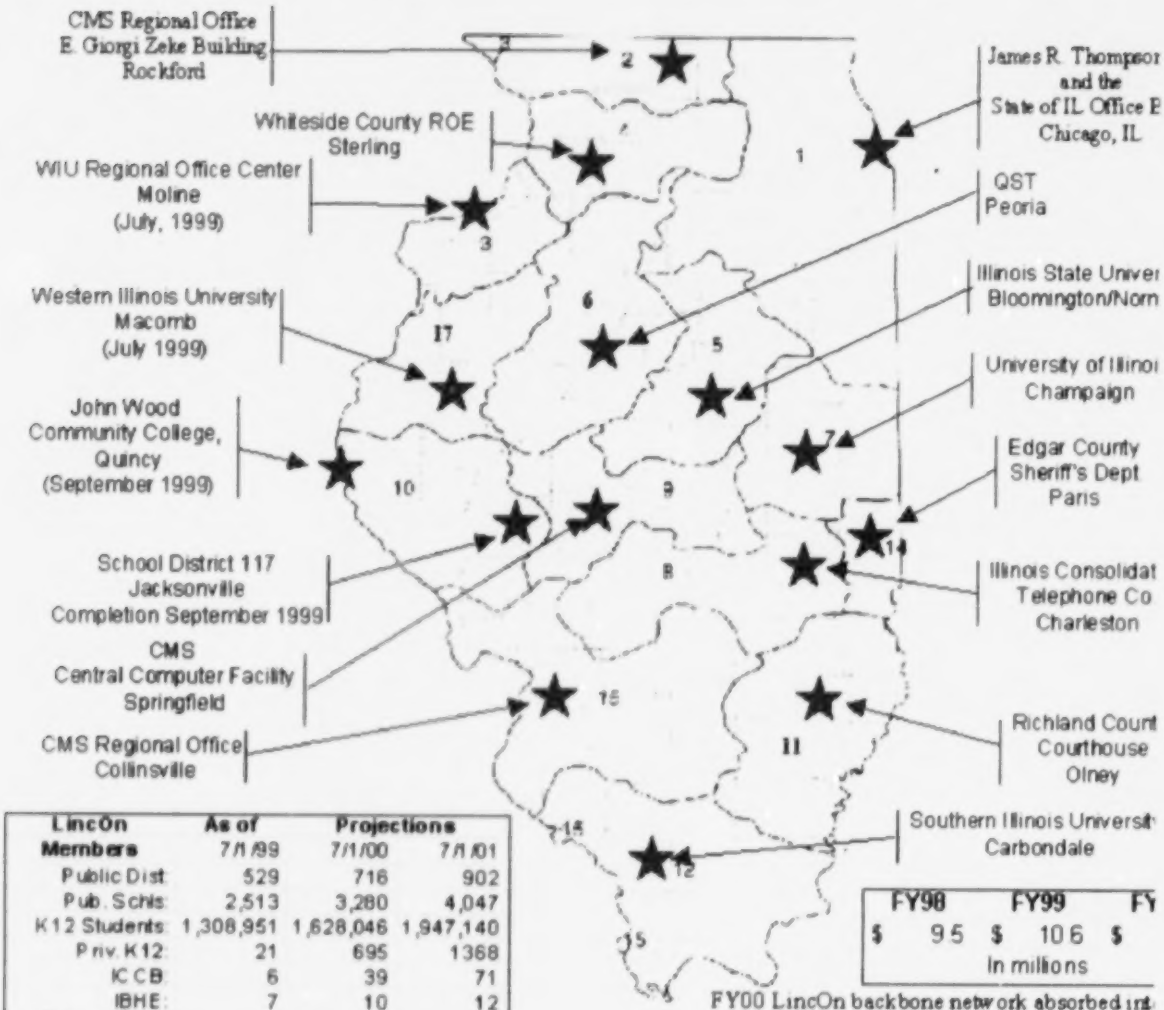
_____ _____
Fiscal Agent Signature Date

_____
Fiscal Agent Name Printed

Facts at a Glance for the Seventeen

# ICN LincOn Points of Presence

and the Market Service Areas (MSAs) they serve




| LincOn Members | As of 7/1/99 | Projections 7/1/00 | 7/1/01 |
|---|---|---|---|
| Public Dist: | 529 | 716 | 902 |
| Pub. Schls: | 2,513 | 3,280 | 4,047 |
| K12 Students: | 1,308,951 | 1,628,046 | 1,947,140 |
| Priv. K12: | 21 | 695 | 1368 |
| ICCB: | 6 | 39 | 71 |
| IBHE: | 7 | 10 | 12 |
| Priv. College: | 7 | 61 | 115 |
| Libraries: | 9 | 397 | 784 |

| FY98 | FY99 | FY |
|---|---|---|
| $ 95 | $ 106 | $ |

In millions

FY00 LincOn backbone network absorbed int
ISBE's $12.0 million + IBHE's $8.0 mil

ICN POPs are located on University Campuses, Community Colleges, CMS facilities, private businesses, an Public K12 Regional Offices of Education. Even if an MSA does not have a completed POP, constituents are being served out of one or more distribution sites within the MSA. ICN supports a number of grooming sites where schools and other entities may connect for Internet access. These currently include over 30 Regional Offices of Education, four community colleges, and one library system.

All ICN POPs are connected together via DS3 (45mbs) circuits. These circuits are a mix of the Ameritech/ GTE/AT&T network being built for CMS, fractional DS3 circuits running on CMS's TDM network, and clear channel point to point DS3s provisioned 'off-net' through CMS. The ICN is an ATM switched network.

The entire ICN network is connected to the Internet at two locations: Chicago and Collinsville. In Chicago, th is a DS3 to SprintLink and an OC3 to the Ameritech maintained Network Access Point or NAP. At the NAP



BEST COPY AVAILABLE

ICN's Internet traffic is carried on a 45mb service from GTE's NAP.net. In Collinsville, there is a DS3 to a pri
Network Access Point (PNAP) in St. Louis. The ICN will have three additional DS3 egress points to the Inter
by December, 1999.

# Illinois State Board of Education

100 North First Street • Springfield, Illinois 62777-0001

**Louis Mervis**
*Chairperson*

**Joseph A. Spagnolo**
*State Superintendent*

**An Equal Opportunity/Affirmative Action Employer**
*Printed by the Authority of the State of Illinois*
April 1998 250 P8-1949 22 No. 626

printed on recycled paper

PRINTED WITH SOY INK